

OTLEY URBAN DISTRICT COUNCIL.

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH, 1895.

POPULATION IN 1891	..	..	..	..	7,838
ESTIMATED POPULATION IN 1894	..	..	..	..	8,216
ESTIMATED POPULATION IN 1895	..	..	..	..	8,346
AREA OF DISTRICT IN ACRES	..	..	..	..	2,370

GENTLEMEN,

I have now to present my Annual Report for 1895, prepared in accordance with the instructions of the Local Government Board. A fresh estimate has to be made year by year of the population, as the interval of 10 years between each census taking has been long felt to place great difficulty in making these estimates reliable. I have estimated the population at 8,346.

The duties of Health Officer and Sanitary Inspector increase yearly. We have made rapid strides within the last few years. If we look back seven years, we had no means of arresting the spread of infectious diseases; no notification; no hospital accommodation; no proper system of disinfection. Now we have the best means of controlling its spread. Then we have our sewage disposal works; our improved methods of clearing away refuse. Surely these are great improvements.

In my last Report, I asked for a few meteorological instruments so as to commence to form the nucleus for a station where the climate of the district might be watched, as at present our knowledge of the way in which the weather acts upon the body is very limited.

The Council generously allowed me a maximum and minimum thermometer, dry and wet bulb thermometer, and a rain-gauge. Monthly records were taken, commencing on October 1st, 1895, and presented to the Council. For my barometric readings I have to thank Mr. Lupton, the Gas Manager, but I hope the Council will be able to see their way to provide a barometer.

267 Births were registered during the year. VITAL STATISTICS: males 139, females 128, giving a birth-rate of 31·9 per 1,000 per annum.

138 Deaths were registered: males 58, females 80, giving a death-rate of 15 per 1,000 per annum. Two were non-residents dying within the district. There have been five inquests within the district this year; of these five, two were due to accident, one on a child burnt to death, and two suicidal.

I give below the number of deaths since 1887 :—

1887	1888	1889	1890	1891	1892	1893	1894	1895
158	120	155	151	131	149	147	108	138

The age distribution from all causes shows that 40 died under one year; 8, one and under five years; 3, five and under fifteen years; 6, fifteen and under twenty-five years; 45, twenty-five and under sixty-five years; 40, over sixty-five years. Of these last 40, 18 reached seventy and over; 4 reached eighty and over; 3 reached ninety and over.

Deaths at
various Ages.

Infant Mortality.	In the age distribution you see that 40 children died under one year; this gives a rate of 149 per 1,000 registered births. This is a much higher rate than 1894, when the rate was 57 per 1,000. These deaths among children were not due specially to the prevalence of any epidemic, as 8 died in the first days of life from premature birth; another 6 died from diarrhoea, their ages all being under seven months; 4 of these occurred in the month of October, when the temperature became suddenly severe, and these extremes are always fatal to the young and old. Still I should like to see a better knowledge brought to bear as to the requirements of early infant life.
Zymotic Diseases.	The number of deaths from zymotic diseases were 9, giving a rate of 1 per 1,000. From small-pox 0, scarlet fever 0, diphtheria 0, erysipelas 0, typhoid 0, typhus 0, measles 0, whooping cough 0, diarrhoea 8, puerperal fever 1.
Notification Returns.	Twenty-four certificates have been received: 10 erysipelas, 8 scarlet fever, 4 typhoid fever, 1 diphtheria, 1 puerperal fever.
Scarlet Fever.	All the 8 notified cases occurred in the first quarter of the year. Most of them were members of one family, and the infection was brought from a neighbouring town. Every precaution was taken, and the clothing was carefully disinfected at the public disinfectory, skilled nursing had been obtained, as when the mother acts as nurse, she is merely a go-between the sick and the healthy, and fresh cases soon begin.
	Every year I see the value of our steam disinfectory; the work is carried out by a man accustomed to the work, and who is paid to do it accurately and efficiently, and no trust is put in the householders to carry it out. Other Urban Districts are only too anxious in times of epidemics to take advantage of it, and willing to pay for its use.
Typhoid or Enteric Fever.	We have had four isolated cases of typhoid. My examination and inquiries did not give any clue to infection from previously existing cases.
	There is certainly the supposition of idiosyncrasy or undue susceptibility on the part of certain people.
	The history and surroundings were not sufficient to give a cause of the illness. The foul state of the closets and ashpits near the house may have been the cause of the origination of these cases of continued fever, which are notified as typhoid.
Diphtheria.	We had one case of diphtheria during the month of December. This is the only reported case of eight years. The case was isolated, and a trained nurse obtained to watch the case. We can only trace it to private defective sanitation: it has been taken in hand, but as yet is merely under supervision. As a town we are very free from this dreadful disease.
	There is one remark with respect to notification which is worthy of notice, and I have to thank Mr. C. J. Newstead for the idea: that is, that a proper system of registration be kept of infectious diseases so as to be looked up for reference and comparison in all epidemics.
	The number of notification certificates in 1894 were more than 1895 by nine.
Influenza.	In the early months of the year we had a mild epidemic of this disease which caused five deaths.
Respiratory Diseases.	From bronchitis and pneumonia there were 21 deaths, viz.: bronchitis 14, and pneumonia 7. This gives us a rate of 2.5 per 1,000 per annum.
Phthisis.	The number of deaths from this disease was 18, giving a rate of 2 per 1,000 per annum.
Sewage Disposal.	The treatment of the sewage has been fairly satisfactory during the year. In the early part of the year there had been a complaint about the effluent. I met Dr. Whitelegge, and he inspected the works and suggested that more alumio-ferrie should be used. This was reported to the Council, and the suggestion was carried out, and we have had no further complaints. Another improvement was the turning of Call Head Beck into the river, so saving the works 400,000 gallons of unpolluted water to treat.

On May 23rd, I received a written complaint as to the pollution from Garnett's Mill. I met the Sanitary Committee, and Mr. Trow was ordered to get samples and have them analysed.

River
Pollution.

I have suggested this should be in the early summer months, also that all the back-yards be frequently inspected, and the refuse removed. We have adopted the Private Street Improvement Act to enable us to see that the back-yards, &c., are properly paved.

Flushing
of Sewers.

On May 15th and 17th, I went over the whole course of the East and West Chevin Water Supply, along with Mr. Trow. I drew up a report and presented it to the Council on the 20th, complaining about the possibilities of contamination at the sources. On May 23rd, the Water Committee went over the Water course. It was suggested to ask Dr. Whitelegge to go over it. On account of some complaints, I went over the East Chevin supply again on the 14th of June, and on reporting to the Council I found we are not using this supply for drinking purposes. On October 14th, we spent a whole day with Dr. Whitelegge going over the water supply of the town. He said the East Chevin is exposed to contamination by farm drainage and soakage. Much may be said of West Chevin supply. Several plans were suggested to prevent the pollution of the source, and piping was recommended. An analysis of the Water was made as it enters the first dam.

Water
Supply.

Mr. Waugh, Engineer, also was commissioned to report on the Water supply, and his report was presented on June 12th. This was fully printed in the local paper.

I give below an analysis of Water from the Bore-hole at Menston: The sample contains in grains, per gallon :—

Chlorides, equal to common Salt,	1.04,	containing Chlorine,	1.11.
Nitrates of Calcium, &c. . . .	none	„	Nitric Acid, none.
Cal. Magnesium Salts, &c.,	} 17.50	„	Injurious Metals, none.
Including Sodium Carbonate			
Volatile and Organic Matter . .	0.40	„	Ammonia, 0.0114.
Total Dissolved Solids	19.74	„	Organic Ammonia, 0.0030.

Oxygen required to Oxidise Organic Matter in fifteen minutes, 0.01.

Smell when warmed to 100° Fahr., none.

Colour of Column two feet in depth, greenish yellow.

Sediment is very small and does not contain Animalculæ.

Hardness in Clark's degrees, total 7° 5" before boiling.

Permanent 3° 2" after boiling.

Temporary 4° 3" lost by boiling.

I give below an analysis of Water from Dade's Well taken Oct. 19th, 1895, at top reservoir: Sample contains in grains, per gallon :—

Chlorides, equal to common Salt	1.64	containing Chlorine,	0.994.
Nitrate of Calcium	none	„	Nitric Acid, none.
Cal. Magnesium Salts	6.69	„	Injurious Metals, none.
Volatile and Organic Matter . .	0.40	„	{ Ammonia } 0.0036.
			{ Organic Ammonia }

Oxygen required to Oxidise Organic Matter in fifteen minutes, 0.022.

Smell when warmed to 100° Fahr., none.

Colour of Column two feet in depth, light yellow, clear.

The Sediment is very small and does not contain Animalculæ.

The analysis proves that at present the Water is free from contamination, and may be safely used for drinking. The purity can only be secured in the future by the most complete precautions as regards the vicinity of any waste matter.

On March 28th, I met the Sanitary Committee with respect to the disposal of refuse. It was proposed and carried that the Council buy horses and suitable closed carts, and carry out the clearing with a staff of their own. This has been a great saving to the town; the work is done more efficiently and systematically. I would

Disposal
of Refuse.

suggest that it be done still more systematically, and that the refuse be cleared away at much shorter intervals and without the necessary notice form, but would clear the whole of the ash-pits in one street at a time, commencing at one end of the town. In my house to house inspection I found the privy midden the greatest eyesore and nuisance, and it impressed on me the desire to establish a frequent, systematic and periodical scavenging.

The scavenging has been carried out by the Council for nine months. I give below a table of the work and cost:—

Notices Received.	Emptied.	Cost.
870 ..	864 ..	£152 5s. 10d.

The number of loads, 1,872; average cost, 1s. 7½d. per load. Here we have a clear saving of £100, judging from the Contractor's charges.

In our annual inspection I reported on the filthy condition of the back-to-back houses in Nelson Street. This yard is one of the most insanitary parts of the town. In our report two years ago, it was named as one of the slums of the town; no mending or patch-work will ever put these houses in a sanitary condition.

Look at the improvement in the other parts of the town reported, viz.: Paradise Square and Cambridge Alley. The old houses pulled down, new streets formed, and suitable healthy houses built.

Common Lodging-Houses.	One, viz., the "Model." This is kept in a very clean condition. It is regularly visited. During the year a man died in one of the rooms, and on the ground of sanitation, I ordered the body to be taken down to the mortuary.
Slaughter-Houses.	Thirteen; condition satisfactory. I received some complaints of suspicious about diseased meat being offered for sale. A strict watch was kept, and a pig was seized, but the Police took the case in hand, as it had died from swine fever. No further cases have been reported.
Bake-Houses.	Seven; all kept in a very clean condition.
Dairies, Cowsheds, and Milkshops.	Dairy, 1; Cowsheds, 21; Milkshops, 16. They have been visited, but nothing has been reported, as the new regulations are in hand. They have been sent up to the Local Government Board along with the new Bye-Laws, and have not been returned.
Offensive Trades.	One fat-melter; one fell-monger. I have no complaints to make.
Sale of Food and Drugs.	Nothing has been done under this head. The Council decided to appoint Mr. Trow, Inspector, but through some informality the appointment was not carried out.
Factories and Workshops.	Some inspection has been certainly carried out, but far from satisfactory. The Nuisance Inspector has only held the appointment six months, so it has been hardly possible to get all the work in.
Hospital for Infectious Diseases.	This is one of the most important improvements the town has carried out. It has rendered in the past good service. This year it has not been occupied. What infectious diseases we have had have been treated at home, because they considered there was sufficient room for efficient isolation. When the infective process is at an end, disinfection is carried out by the officers of, and at the expense of, the Council.

I would suggest that the Council obtain a better form of ambulance to enable us to convey patients to and from the hospital.

TABLE SHOWING PARTICULARS OF NUISANCES ABATED, AND
SANITARY WORK DONE, 1895.

Water in Cellars	..	..	..	..	..	..	..	..	..	remedied,	10
Wet Middens	..	..	..	..	..	..	..	..	..	„	30
Stop Drains	..	..	..	..	..	..	..	..	..	„	32
Drains relaid	..	..	..	..	..	..	..	..	..	..	32
Drains inspected	..	..	..	..	..	..	..	..	..	..	32
Drains untrapped	..	..	..	..	..	..	..	..	..	..	14
Houses without Drains	..	..	..	..	..	..	..	..	..	..	2
Accumulation of offensive matter	..	..	..	..	..	..	..	..	..	..	2
Buildings inspected	..	..	..	..	..	..	..	..	..	..	35
W. C.'s defective	..	..	..	..	..	..	..	..	..	..	3
Bad Meat	..	..	..	..	..	..	..	..	..	..	1
											129

DEATHS AND BIRTHS SINCE 1887.

	1887	1888	1889	1890	1891	1892	1893	1894	1895
Deaths	.. 158	.. 120	.. 155	.. 151	.. 131	.. 149	.. 147	.. 108	.. 138
Rates	19.7	16.6	19.2	18.8	16.6	18.6	17.8	13.1	15.0
	1887	1888	1889	1890	1891	1892	1893	1894	1895
Births	.. 220	.. 289	.. 236	.. 237	.. 230	.. 248	.. 242	.. 315	.. 267

DEATHS FROM ZYMOTIC DISEASES SINCE 1887.

1887	1888	1889	1890	1891	1892	1893	1894	1895
22	.. 2	.. 7	.. 4	.. 5	.. 16	.. 7	.. 4	.. 9

			1892	1893	1894	1895
Phthisis	Death	Rate	.. 1.3	.. 1.6	.. 1.1	.. 2.0
Respiratory	„	„	.. 3.5	.. 4.0	.. 2.4	.. 2.5
Infantile Mortality	Deaths under one year per 1,000 Births.		.. 121	.. 165	.. 57	.. 149

POPULATION SINCE 1861.

			Population.		No. of Inhabited Houses.		Uninhabited Houses.
1861	..	..	4714	..	.. 1007	..	.. 69
1871	..	..	5855	..	.. 1240	..	.. 33
1881	..	..	6806	..	.. 1324	..	.. 149
1891	..	..	7838	..		..	
1895	..	..	8346	..		..	

(A) **TABLE I.** TABLE OF DEATHS during the Year 1895, in the OTLEY URBAN DISTRICT, classified according to DISEASES, AGES and LOCALITIES.

NAME OF LOCALITY adopted for the purpose of these Statistics; public institutions being shown as separate localities.	MORTALITY FROM ALL CAUSES AT SUBJOINED AGES.								MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																							
	At all ages.	Under 1 year.	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	(i)	1	2	3	4	FEVERS.					9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
									5	6	7	8	Typhus	Enteric or Typhoid.	Continued	Relapsing	Puerperal.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhœa and Dysentery.	Rheumatic Fever.	Phthisis.	Bronchitis, Pneumonia and Pleurisy.	Heart Disease.	Influenza.	Injuries.	Old Age.	All Other Diseases.		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)																								
OTLEY URBAN DISTRICT COUNCIL.	138	40	8	3	6	41	40	Under 5 5 upwards									1															
Deaths occurring within the district among persons not belonging thereto.								Under 5 5 upwards																								
																										</						

(B) **TABLE II.** TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1895, in the OTLEY URBAN DISTRICT; classified according to DISEASES, AGES and LOCALITIES.

NAME OF LOCALITY adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	POPULATION AT ALL AGES.		Registered Births.	Aged under 5 or over 5.	NEW CASES OF SICKNESS IN EACH LOCALITY, COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.													NUMBER OF SUCH CASES REMOVED FROM THEIR HOMES IN THE SEVERAL LOCALITIES FOR TREATMENT IN ISOLATION HOSPITAL.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	(b) Census, 1891.	(c) Estimated to middle of 1895.			(d)	(e)	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	13																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
							Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued	Relapsing	Puerperal.	Cholera.	Erysipelas.							Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued	Relapsing	Puerperal.	Cholera.	Erysipelas.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
OTLEY URBAN DISTRICT COUNCIL.	7,838	8,346	267	Under 5 5 upwds.	3	3	1		4				1		1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

“ Notification of Infectious Disease ” is compulsory in the District since 1st September, 1892. Hospital provided is the Otley Infectious Diseases Hospital, in the Otley District.

OTLEY
URBAN DISTRICT
COUNCIL.

ANNUAL REPORT

OF THE

Medical Officer of Health
FOR 1895.

W. E. BENNETT,
Medical Officer of Health.